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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/864,607 | 05/23/2001 | Peter J. Brittenham | RSW920010106US1 | 3651 |

7590 03/08/2007
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| EXAMINER |
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EL CHANTI, HUSSEIN A

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| ART UNIT | PAPER NUMBER |
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2157

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/08/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/864,607

Applicant(s)

BRITTENHAM ET AL.

Examiner

Hussein A. El-chanti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25,26,28-48,50 and 52-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25,26,28-48,50 and 52-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/07.9/06.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to restriction election received on Jan. 5, 2007. Claims 35 and 36 were elected with traverse. Claims 52-57 were newly added. Claims 25-26, 28-48, 50 and 52-57 are pending examination.

2. Applicant's arguments with respect to the restriction requirement mailed on Dec. 5, 2006 have been considered and are persuasive. The restriction requirement have been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 25-26, 28-48, 50 and 52-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Landherr et al., U.S. Patent No. 6,880,156 (referred to hereafter as Landherr).

As to claim 25, Landherr teaches a method of dynamically undeploying services in a computing network, the method comprising:

receiving an undeployment trigger for a selected service (see col. 3 lines 49-col. 4 lines 55);

responsive to receiving the undeployment trigger, determining one or more network locations where the selected service is deployed (see col. 5 lines 5-17); and

responsive to receiving the undeployment trigger, effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations (see col. 5 lines 5-17);

wherein services comprise web services (see col. 1 lines 15-25);

wherein receiving an undeployment trigger comprises receiving an undeployment trigger for a selected web service in the computing network (see col. 3 lines 49-col. 4 lines 55, the web servers that meet a specific criteria are deactivated);

wherein determining one or more network locations comprises determining one or more network locations where the selected web service is deployed in the computing network (see col. 3 lines 49-col. 4 lines 55, a plurality of servers are determined to meet a predefined criteria); and

wherein effecting a dynamic undeployment comprises effecting a dynamic undeployment by programmatically removing the selected web service from one or more selected ones of the network locations in the computing network (see col. 3 lines 49-col. 4 lines 55, servers are deactivated by sending a deactivation signal).

As to claim 26, Landherr teaches the method according to claim 25, further comprising:

receiving client requests for the selected service; and

continuing to serve the received requests from the network locations other than the one or more selected ones from which the selected service was programmatically

removed (see col. 3 lines 49-col. 4 lines 55, only selected servers are deactivated while other servers continue to service requests).

As to claim 28, Landherr teaches the method according to Claim 25 wherein the undeployment trigger is based upon network load at the network locations (see col. 4 lines 12-55).

As to claim 29, Landherr teaches the method according to claim 25, wherein the undeployment trigger is an undeployment request issued by an origin server from which the selected service was initially deployed (see col. 3 lines 49-col. 4 lines 55).

As to claim 30, Landherr teaches the method according to Claim 29, further comprising:

- sending the undeployment request to all of the network locations;

- shutting down the selected service at the network locations, responsive to receiving the undeployment trigger, and removing executed code which implements the selected service from a run-time environment of each network location;

- shutting down the selected service at the origin server responsive to receiving the undeployment trigger, and removing executed code which implements the selected service from a run-time environment of the origin server; and

- making the selected service unlocatable in the computing network (see col. 3 lines 49-col. 4 lines 55 and col. 5 lines 10-17).

As to claim 31, Landherr teaches the method according to claim 25, wherein the undeployment trigger is based upon usage of the selected service at the network locations (see col. 4 lines 15-47).

As to claim 32, Landherr teaches the method according to claim 31, wherein the usage is an average number of client requests for the selected service within a predetermined time interval (see col. 4 lines 15-47).

As to claim 33, Landherr teaches the method according to claim 31, further comprising:

comparing the usage of the selected service to a predetermined threshold, and sending the undeployment trigger when the usage falls below the predetermined threshold (see col. 4 lines 15-47).

As to claim 34, Landherr teaches the method according to claim 33, wherein a value of the predetermined threshold may be modified over time (see col. 4 lines 15-47).

As to claim 35, Landherr teaches the method according to claim 33, wherein a value of the predetermined threshold applies to a plurality of deployed services (see col. 4 lines 15-47 and col. 5 lines 10-17).

As to claim 36, Landherr teaches the method according to claim 33, wherein the predetermined threshold applies individually to the selected service (see col. 4 lines 15-47).

As to claim 37, Landherr teaches the method according to claim 33, wherein a value of the predetermined threshold applies to all of the network locations (see col. 4 lines 15-47 and col. 5 lines 10-17).

As to claim 38, Landherr teaches the method according to claim 33, wherein a value of the predetermined threshold applies to the one or more selected ones of the network locations (see col. 3 lines 50-col. 4 lines 47).

As to claim 39, Landherr teaches the method according to claim 33, wherein a value of the predetermined threshold is initially set when the selected service is deployed (see col. 3 lines 50-col. 4 lines 47).

As to claim 40, Landherr teaches the method according to claim 33, further comprising:

obtaining the usage at periodic intervals for use when comparing the usage of the selected service to a predetermined threshold (see col. 3 lines 50-col. 4 lines 40).

As to claim 41, Landherr teaches the method according to claim 40, wherein the obtaining the usage comprises obtaining the usage from all of the network locations.

As to claim 42, Landherr teaches the method according to claim 41, wherein obtaining the usage comprises obtaining the usage from representative ones of the network locations.

As to claim 43, Landherr teaches the method according to claim 41, wherein the programmatically removing occurs at a particular one of the network locations, and wherein the obtaining the usage comprises obtaining the usage from the particular one.

As to claim 44, Landherr teaches the method according to claim 25, further comprising:

monitoring a load on the computing network; and
triggering the dynamic undeployment when the monitored load meets a predetermined threshold (see col. 3 lines 50-col. 4 lines 47).

As to claim 45, Landherr teaches the method according to claim 25, wherein programmatically removing the selected service further comprises issuing an

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undeployment request for the selected service to the one or more selected ones (see col. 3 lines 50-col. 4 lines 47).

As to claim 46, Landherr teaches the method according to claim 45, further comprising:

receiving the undeployment request at a particular one of the network locations, the particular one being the selected one of the network locations from which the selected service is being dynamically undeployed; and

shutting down the selected service at the particular one, responsive to receiving the undeployment trigger, and

removing executed code which implements the selected service from a run-time environment of the particular one (see col. 3 lines 50-col. 4 lines 47 and col. 5 lines 10-17).

As to claim 47, Landherr teaches the method according to claim 46, further comprising:

making the selected service unlocatable from a routing system (see col. 3 lines 50-col. 4 lines 47 and col. 5 lines 10-17).

As to claims 48, 50 and 52-57 do not present any further limitation above claims 25-47 and therefore are rejected under similar rationale.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

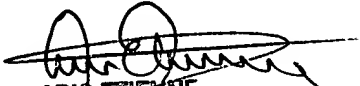
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A. El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hussein Elchanti

Feb. 27, 2007


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